

The grass is too delicate to handle golf carts. (Cue the caddy-job-creation program here.)

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# Life

HOME GOING GREEN HEALTH



HOME

## Nightmare on Bedbug Street.

They're back with a vengeance. Why the best defense may be nonchemical

BY NINA BURLEIGH

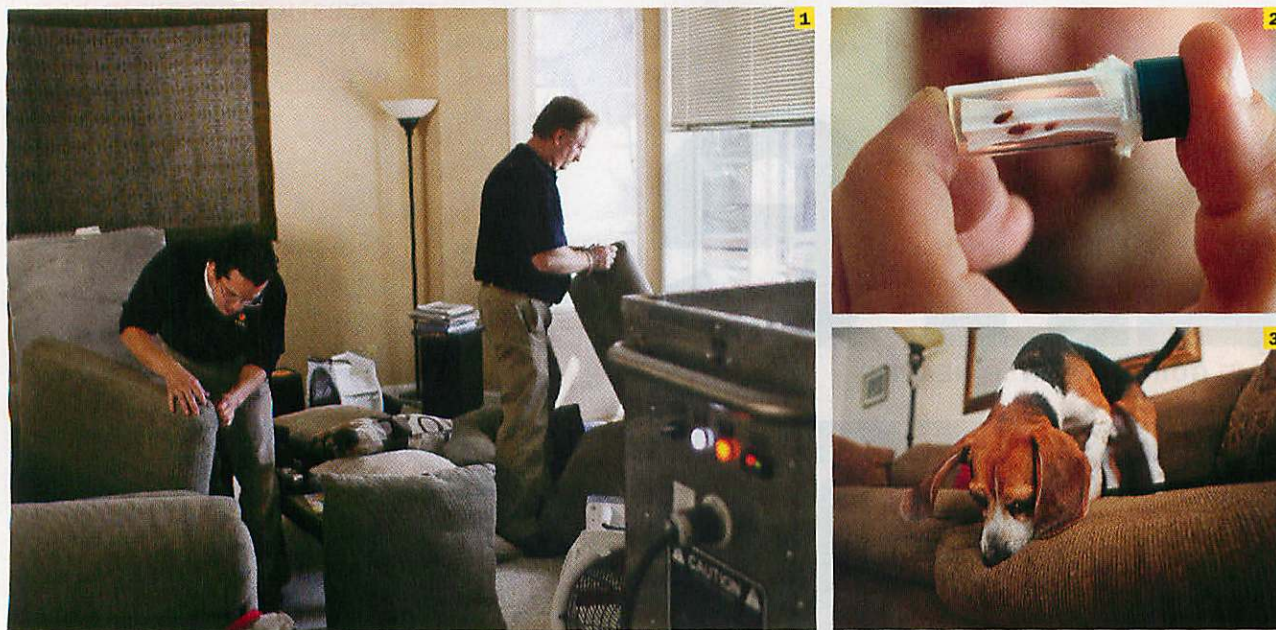
AN HOUR AFTER FALLING ASLEEP IN A HOTEL in Bologna, Italy, I woke up to a nightmare. Flicking on the bedside lamp, I saw a dozen or more small reddish-brown bugs on the crisp white linen near my pillow. The bugs were moving slowly, apparently in a state of blood-gorged euphoria, and I was able to trap a few under an ashtray with one hand while dialing the front desk with the other as I tried to remember the Italian word for *bug*. A hotel manager bustled up and assured me in accented English that the creatures were "just from the garden," but he moved me to another room anyway.

The next night, with red, itchy welts from head to foot, I identified my little bedmates by going to Google and looking up pictures of bedbugs.

Nearly eradicated for the past half-century in the industrialized world, *Cimex lectularis* (the second word stems from the Latin for *small bed*) is on the rise and presenting a 21st century environmental challenge. In the *Mad Men* days of pest control, the local bug specialist would visit a house with a gleaming



## The New Bug Bombs. How to evict these suckers



**1** Pest technicians inspect furniture prior to heating rooms above 113°F (45°C) **2** Heat is the preferred abatement method, since the tick-size bugs can hide in small crevices **3** Dogs trained to sniff out the bugs and their eggs are used for early detection or to pinpoint follow-up areas

sprayer and leave every surface soaked, bedding included. If little Susie and Johnny subsequently developed a headache or cough, well, they just needed to get a little sunshine and fresh air. “You could go down to the local drugstore, buy a DDT bug bomb, and everybody could slay their own bedbugs,” says Michael F. Potter, a University of Kentucky entomologist who spends hours pouring poisons on bedbugs in his lab, seeking the elusive potion that kills them without harming humans or pets.

The bugs developed a resistance to DDT decades ago, but Potter says there is still at least one pesticide, propoxur, that kills adult bedbugs within 24 hours and keeps killing newborns as they hatch. The U.S. Environmental Protection Agency, however, banned propoxur for in-home use in the 1990s, on the basis of animal tests and ill effects on adult workers who were exposed to it. “We believe the window between a safe dose and a dangerous dose for a toddler is very small,” says EPA pesticide chief Steven Bradbury.

All over the world, national and local governments are mobilizing strategies to control infestations of the resilient insects, which can hide in almost any crack or crevice—not just in houses and hotels but also in offices, churches, libraries and restaurants—and can go a year or more without eating. On Aug. 10, the EPA issued a consumer alert about off-label bedbug treatments, warning in particular of

the dangers of using outdoor pesticides in homes. This summer, New York City allocated \$500,000 to a bedbug battle plan that includes a Web portal to educate a freaked-out public and training for pest-management professionals. Similar defenses have been mounted in other U.S. cities, including San Francisco, Chicago and Cincinnati, where the problem is so dire that the city created a Bedbug Remediation Commission in 2007 and some people with infested apartments have resorted to sleeping on the streets.

Concerns about propoxur’s health effects on children didn’t stop the Ohio Department of Agriculture from petitioning the EPA for an exemption to allow in-home use of the neurotoxicant. Although the EPA rejected Ohio’s propoxur plea in June, the agency scheduled an Aug. 18 meeting with state and municipal leaders to try to formulate an abatement strategy everyone could live with. Among the meeting’s participants: representatives from the Centers for Disease Control and Prevention and, no joke, the Department of Defense.

But before we join Ohioans and hit the streets with “Spray, baby, spray” placards, it’s worth noting that scientists don’t agree on whether a silver-bullet pesticide exists. “Propoxur might work for a few years, but then we would select for the genetically resistant bedbugs, and they would be right back,” says Dini Miller, an entomologist at Virginia Tech and the state’s urban-pest-management specialist.

That leaves behavioral lines of defense as the most durable strategies. Dogs have been trained to sniff out bedbugs, and specialized pest companies can haul in machines that heat entire rooms to well north of 113°F (45°C), at which point the bugs die. Heat treatments cost thousands of dollars per room, but the lower-cost alternative of simply throwing out your infested mattress or furniture likely won’t solve the problem—and may spread it to your salvaging neighbor.

For home infestations, the EPA recommends reducing clutter, sealing cracks and crevices, vacuuming often, drying infested clothes at high heat and using a special mattress cover so you can sleep tight without letting the bedbugs bite. Travelers should inspect hotel mattresses, box springs and headboards for the pests and the ink-like streaks of their droppings.

Bedbugs don’t transmit disease, but they can be harmful to mental health, as many Ohioans (and I) can attest. “We are hopeful that the outcome of this meeting provides a solution,” Ohio agriculture secretary Robert Boggs says of the Aug. 18 session. “Quite frankly, something needs to happen, and it needs to happen quickly.”

To my great relief, the bedbugs Bolognese didn’t follow me home. I carefully inspected my luggage for stowaways and tossed my clothes into an outdoor shed upon arrival. But I haven’t slept quite as soundly in a hotel bed since. On my to-do list: buying a mattress cover that can fit in my carry-on.